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DH	AR	4	Bingham, J.	A.C., "Multicari nunications Mag	rier Modulation for Data Tran azine, IEEE, Vol. 28, No. 5,	nsmission: An Idea May 1990, pages 5	Whose Tim -8 and 11-1	ie Has Come," 4.			
PH	AS	4	Chiddix, J. Selected An	Chiddix, J. et al., "AM Video on Fiber in CATV Systems: Need and Implementation," IEEE Journal on Selected Areas in Communications, IEEE, Vol. 8, No. 7, September 1990, pages 1229-1239.							
pH	AT	4	Darcie, T., Journal on	Darcie, T., "Subcarrier Multiplexing for Lightwave Networks and Video Distribution Systems," <i>IEEE Journal on Selected Areas in Communications</i> , IEEE, Vol. 8, No. 7, September 1990, pages 1240-1248.							
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Dң	AR .	<u>5</u>	Lenosky, T 802.3ae - E	enosky, T. et al., "Measurements of DMD-Challenged Fibers at 850nm and 2Gb/s Data Rate," IEEE 02.3ae - Equalization Ad Hoc Group, IEEE, January 10, 2001, 21 pages.								
DH	AS	2	Lenosky, T 802.3ae - E	enosky, T. et al., "Measurements of DMD-Challenged Fibers at 1310nm and 1Gb/s Data Rate," IEEE 02.3ae - Equalization Ad Hoc Group, IEEE, January 10, 2001, 21 pages.								
DH	AT	8	Liu, M-K. Subcarrier July 1994,	iu, M-K. and Modestou, P., "Multilevel Signaling and Pulse Shaping for Spectrum Efficiency in ubcarrier Multiplexing Transmission," <i>IEEE Journal of Lightwave Technology</i> , IEEE, Vol. 12, No. 7, 11y 1994, pages 1239-1246.								
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Dη	AS	5	Converters	Williamson, R.C. et al., "Effects of Crosstalk in Demulitplexers for Photonic Analog-to-Digital Converters," Journal of Lightwave Technology, IEEE, Vol. 19, No. 2, February 2001, pages 230-236.								
DH	AT	<u>5</u>	Yang, C-K Internet:≺I 2004, 31 p	Yang, C-K., "Design Techniques for High-Speed Chip-to-Chip Links," Retrieved from the Internet: <url: 2004,="" 28,="" 31="" 97578="" courses="" http:="" pages.<="" september="" td="" topic5="" tutorial_seriallink.pdf,="" web.doc.carleton.ca=""></url:>								
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Equivalent of Form PTO/SB/08B (09-08) Approved for use through 03/31/2007. OMB 0851-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO Complete if Known 10/085,071 **Application Number** FOURTH SUPPLEMENTAL Filing Date March 1, 2002 INFORMATION DISCLOSURE First Named Inventor Oscar Agazzi STATEMENT BY APPLICANT Art Unit 2616 (Use as many sheets as necessary) Examiner Name Ho, Duc Chi Sheet of Attorney Docket Number 1875.1280001 NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of Examiner Cite Initials* No.1 the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published Izzard, M.J. et al., "Analog versus Digital Control of a Clock Synchronizer for a 3 GB/s DH NPL1 Data with 3.0V Differential ECL," 1994 Symposium on VLSI Circuits Digest of Technical Papers, IEEE, pp. 39-40. Schmidt, L. and Rein, H.-M., "Continuously Variable Gigahertz Phase-Shifter IC DH NPL2 Covering more than One Frequency Decade," IEEE Journal of Solid-State Circuits, Vol. 27, No. 6, pp. 854-862, June 1992. NPL3 NPL4 NPL5 NPL6 NPL7 NPL8 NPL9 NPL10 639683 1.DOC

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This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS SEND To Commissions for Patents P.O. Rox 1450, Alexandria, VA 22313-1450. ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

MAR U 9 2005 Page 1 of 3 APPLICATION NO. ATTY. DOCKET NO. FRANCIA TRADENA **FORM PTO-1449** 10/085,071 1875.1280001 **INVENTORS** THIRD SUPPLEMENTAL AGAZZI et al. INFORMATION DISCLOSURE STATEMENT ART UNIT FILING DATE 2665 March 1, 2002 **U.S. PATENT DOCUMENTS EXAMINER** DOCUMENT NUMBER CLASS SUB-CLASS FILING DATE INITIAL DATE NAME AA1 5,396,224 03/1995 Dukes et al. AB1 5,550,546 08/1996 Noneman et el. 09/1996 AC1 5,554,945 Lee et al. AD1 5,614,855 03/1997 Lee et al. AE1 5,703,905 12/1997 Langberg 5,768,268 AF1 06/1998 Kline et al. AG1 5,822,143 10/1998 Cloke et al. 5,881,107 03/1999 Termerinac et al. AH1 Al1 5,945,862 08/1999 Donnelly et al. AJ1 09/1999 5,949,820 Shih et al. AK1 5,966,415 10/1999 Bliss et al. FOREIGN PATENT DOCUMENTS EXAMINER INITIAL **DOCUMENT NUMBER** DATE SUB-CLASS COUNTRY CLASS TRANSLATION 11/1992 EP AL1 EP 0 515 074 N/A 04/1999 AM₁ EP 0 909 035 EP N/A 11/2001 wo AN1 WO 01/84702 N/A **A01** WO 01/84724 11/2001 WO N/A AP1 WO 02/071616 09/2002 wo N/A OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.) Buchwald, A. and Martin, K., Integrated Fiber-Optic Receivers, Kluwer Academic Publishers, ISBN AR1 0-7923-9549-2, Copyright 1995 (entire book submitted). Sidiropoulos, S. and Horowitz, M. A., "A Semidigital Dual Delay-Locked Loop," IEEE Journal of AS1 Solid-State Circuits, IEEE, Vol. 32, No. 11, November 1997, pp. 1683-1692. AT1 **EXAMINER** DATE CONSIDERED

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EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA2	6,002,279	12/1999	Evans et al.			
	AB2	6,005,445	12/1999	Katakura			
	AC2	6,009,534	12/1999	Chiu et al.			
	AD2	6,038,269	03/2000	Raghavan			
	AE2	6,122,336	09/2000	Anderson			
	AF2	6,134,268	10/2000	McCoy			
	AG2	6,329,859 B1	12/2001	Wu			
	AH2	6,359,486 B1	03/2002	Chen			
	Al2	6,397,048 B1	05/2002	Toda			
	AJ2	6,404,525 B1	06/2002	Shimomoura et al.			
	AK2	6,498,694 B1	12/2002	Shah			
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DH	AA3	6,509,773 B2	01/2003	Buchwald et al.			
KQ	AB3	6,621,862 B1	09/2003	Dabell			
Daн	AC3	6,791,388 B2	09/2004	Buchwald et al.	_	1	
DH	AD3	2002/0012152 A1	01/2002	Agazzi et al.			
ŊН	AE3	2002/0034222 A1	03/2002	Buchwald et al.			
DH	AF3	2002/0039395 A1	04/2002	Buchwald et al.			
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